

**PRACTICE TEST WITH
SAMPLE TEST ITEMS**

BASED ON GRADE LEVEL STANDARDS

ELA

FOURTH GRADE

Read the passage. Then, answer questions 1 through 5.

Man's First Flight

by Kiera Downie

Orville and Wilbur Wright became famous when they flew their airplane, the Wright Flyer, into the pages of history. But humans had been flying for many years before that famous event. Hot air balloons were the first way humans flew. The idea for these balloons came from China over a thousand years ago. The Chinese made a lantern to use as a signal. It was a balloon made of paper, using a candle to both light it and carry it upward. It wasn't long before people began to think that if they could make a small balloon fly, they could make a big balloon fly, too—one big enough to hold a person.

Today, the hot air balloon design is the same as the balloons in China, although the materials are a little different. We now make the balloons from nylon, a strong and flexible material. They are attached to large baskets that are made of wicker and big enough to carry people. Wicker is woven wood that is strong and lightweight. The strength helps the basket hold the passengers. The light weight makes it easy for the balloon to carry the basket.

The hot air balloon flies by a simple design. The balloon is filled with hot air. Hot air weighs less than cold air. So when the hot air is trapped inside of the balloon, the balloon's response is to rise up in the cooler air surrounding it.

In order to make sure the balloon continues to float, the air is heated by burners. The burners are filled with propane which is the same fuel used in outdoor gas grills. Just like a grill, the propane is lit and burns right beneath the opening at the bottom of the balloon. That flame heats the air inside the balloon and makes it rise into the air. The balloon's pilot must turn the burner on and off to heat the air. In this way, the pilot makes the balloon move up and down. But how does a hot air balloon move from side to side?

Hot air balloons travel on natural air currents. An air current is a flow of air over the earth. We feel air currents as wind on our faces. All around the world, air flows in different directions. These currents flow in layers above the earth. Sometimes one current will flow east, but the current above it will flow west. A hot air balloon pilot uses the burner to lift the balloon into different currents. The balloon moves east, west, north, or south depending on the current it's in.

Of course, a hot air balloon also has to land. To land, the pilot has to slowly cool the air inside. The pilot opens a flap at the top of the balloon. The flap lets in cool air and releases hot air from the balloon. As the air slowly cools, the balloon drops from the sky. It is important the pilot lets the cool air in slowly, or the balloon will fall too quickly. The balloon drifts downward and eventually comes to a stop on the ground.

Once the balloon lands, the pilot releases all of the remaining air. This is called deflation. When the balloon is deflated, it lays flat as a pancake on the ground, and the passengers can leave the basket.

Grade 4 ENGLISH LANGUAGE ARTS Sample

Hot air balloons are difficult to pilot. They only move as fast as the air currents will carry them. Because of this, we don't fly balloons to work or school. However, hot air balloons are a wonderful way to see the earth from up in the clouds. It's strange to think that a simple idea for a lantern led to the modern use of hot air balloons. It's even more strange when you learn that the way balloons fly isn't much different from the way those lanterns flew.

1. Which sentence from the passage supports the conclusion that the Chinese discovered that hot air is lighter than cold air?
 - A. "Hot air balloons were the first way humans flew."
 - B. "The idea for these balloons came from China over a thousand years ago."
 - C. "The Chinese made a lantern to use as a signal."
 - D. "It was a balloon made of paper, using a candle to both light it and carry it upward."

2. This question has two parts. First, answer part A. Then, answer part B.

Part A

Which sentence **best** describes the author's main idea in paragraph 1?

- A. The hot air balloon was invented before the airplane.
- B. Human flight was the idea of Orville and Wilbur Wright.
- C. Human flight, which is important to history, is over a thousand years old.
- D. The hot air balloon, the first way humans flew, was based on ancient Chinese lanterns.

Part B

Which detail from the passage **best** supports your answer in part A?

- A. "...they flew their airplane, the Wright Flyer, into the pages of history."
- B. "...humans had been flying for many years before that famous event."
- C. "Hot air balloons are the first way humans flew."
- D. "The idea for these balloons came from China, over a thousand years ago."

Grade 4 ENGLISH LANGUAGE ARTS Sample

3. This question has two parts. First, answer part A. Then, answer part B.

Part A

Which conclusion about the author's purpose is supported by the passage?

- A. to explain how a hot air balloon works
- B. to describe the history of human flight
- C. to explain how humans changed the way people flew
- D. to describe how the modern hot air balloon was created

Part B

Which sentence from the passage **best** supports your answer in part A?

- A. "Orville and Wilbur Wright became famous when they flew their airplane, the Wright Flyer, into the pages of history."
- B. "Today, the hot air balloon design is the same as the balloons in China, although the materials are a little different."
- C. "The hot air balloon flies by a simple design."
- D. "However, hot air balloons are a wonderful way to see the earth from up in the clouds."

Grade 4 ENGLISH LANGUAGE ARTS Sample

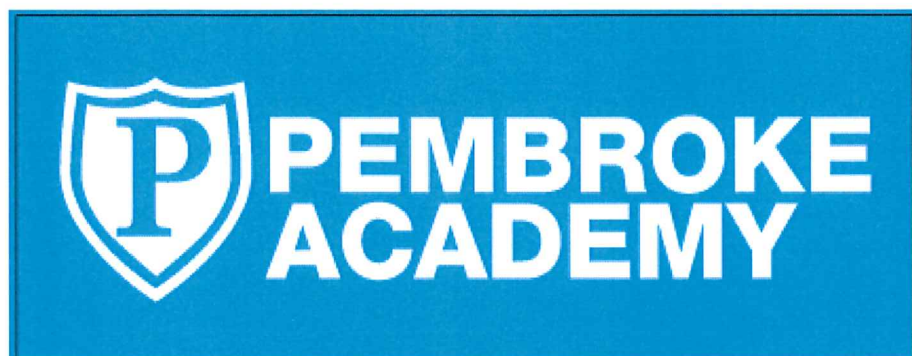
4. Read the paragraphs from the passage.

In order to make sure the balloon continues to float, the air is heated by burners. The burners are filled with propane which is the same fuel used in outdoor gas grills. Just like a grill, the propane is lit and burns right beneath the opening at the bottom of the balloon. That flame heats the air inside the balloon and makes it rise into the air. The balloon's pilot must turn the burner on and off to heat the air. In this way, the pilot makes the balloon move up and down. But how does a hot air balloon move from side to side?

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How does the author's use of these paragraphs add to the reader's understanding of air movement? Make **two** choices.

- A. The paragraphs help the reader understand that moving air feels hot.
 - B. The paragraphs help the reader understand how to move hot and cold air.
 - C. The paragraphs help the reader understand the use of propane gas to move air.
 - D. The paragraphs help the reader understand that hot air balloons travel on currents.
 - E. The paragraphs help the reader understand how hard it is for the pilot to fly a balloon.
 - F. The paragraphs help the reader understand the role the pilot plays in moving the balloon.
5. How is the second paragraph different from the ones that come after it in the passage?
- A. It describes the history of hot air balloons, while the other paragraphs describe how modern hot air balloons are made.
 - B. It helps a reader understand why a hot air balloon can fly, while the other paragraphs help a reader understand how to fly one.
 - C. It describes how hot air balloons carry passengers, while the other paragraphs describe how passengers get out of hot air balloons.
 - D. It helps a reader understand the materials needed for building a hot air balloon, while the other paragraphs help a reader understand how to fly one.
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**PRACTICE TEST WITH
SAMPLE TEST ITEMS**




BASED ON GRADE LEVEL STANDARDS

MATH

FOURTH GRADE

M-STEP Grade 4 MATHEMATICS Sample

1. Select the statement that explains how the values of the numbers 420 and 4,200 are different.
- A. 4,200 is 1,000 times as large as 420
 - B. 4,200 is 100 times as large as 420
 - C. 4,200 is 10 times as large as 420
 - D. 4,200 is 1 time as large as 420
2. Choose the box that matches each figure as pictured with its description. Each figure may be matched to more than one description.

	Has at Least One Right Angle	Has at Least One Pair of Perpendicular Sides	Has at Least One Pair of Parallel Sides
 Rectangle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Rhombus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Parallelogram	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

M-STEP Grade 4 MATHEMATICS Sample

3. Figure A has $\frac{2}{3}$ of its whole shaded gray.

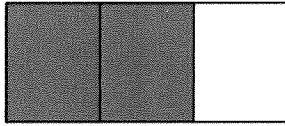


Figure A

Decide if each fraction is equal to $\frac{2}{3}$. Select Yes or No for each fraction.

	Yes	No
$\frac{4}{6}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{1}{2}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{8}{12}$	<input type="checkbox"/>	<input type="checkbox"/>

4. Select True or False for each comparison.

	True	False
$\frac{1}{4} < \frac{2}{12}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{2}{10} > \frac{3}{5}$	<input type="checkbox"/>	<input type="checkbox"/>
$\frac{4}{6} > \frac{5}{12}$	<input type="checkbox"/>	<input type="checkbox"/>

M-STEP Grade 4 MATHEMATICS Sample

5. A pattern is generated using this rule:

Start with the number 7 as the first term and add 5.
Enter numbers into the boxes to complete the table.

Term	Number
First	7
Second	<input type="text"/>
Third	<input type="text"/>
Fourth	<input type="text"/>
Fifth	<input type="text"/>

6. Select True or False for each comparison.

	True	False
5 hundreds + 4 tens > 50 + 400	<input type="checkbox"/>	<input type="checkbox"/>
524 < 50 + 200 + 4	<input type="checkbox"/>	<input type="checkbox"/>
50 tens + 20 ones = 520	<input type="checkbox"/>	<input type="checkbox"/>

M-STEP Grade 4 MATHEMATICS Sample

7. Select **all** the numbers that make this inequality true.

$$2\frac{1}{8} > \square + 1 + \frac{1}{8}$$

$\frac{1}{8}$

$\frac{4}{8}$

$\frac{10}{8}$

$\frac{16}{8}$

8. Select **all** equations that are true.

$\frac{4}{10} = 0.04$

$\frac{17}{100} = 0.17$

$\frac{9}{100} = 0.09$

$\frac{6}{100} = 0.60$